

IN THE SPECIFICATION:

Please amend the following paragraphs starting at page 4, line 6 as follows:

Fig. 1 is a block diagram illustrating the basic components of an imaging system 10. Referring to Fig. 1, the imaging system 10 includes an illumination source 12 for illuminating ~~illumination~~ a mask 14 (also known as a reticle). Once passing through the mask, the light passes through a pupil 16 and is captured by the projection lens 18 and projected onto the substrate 20, on which the desired pattern is to be imaged. As can be appreciated from Fig. 1, if aberrations exist in the projection lens of the imaging system, degradations in performance occur.

It is noted that methods for optimizing the source illumination and mask patterns so as to improve the overall printing performance have been disclosed in the prior art. ~~One~~ One such method is disclosed in USP Publication No. 2002/01490920 A1 to Rosenbluth et al. Specifically, Rosenbluth discloses a lithographic optimization system that alleges to perform an optimization of source illumination and mask patterns to improve the printing of a given mask pattern. The function of merit utilized by Rosenbluth for determining the optimal combination of the source/mask pattern is the aerial image log-slope at a number of pre-selected points along the border of the pattern geometry. The optimization algorithm appears based on the assumption that the printing of a lithographic pattern is solely determined by the set of diffraction orders collected in the imaging pupil, independent of their location in the pupil plane.